Modified Inferior Turbinoplasty
Paolo Gottarelli

Modified Inferior Turbinoplasty

A New Surgical Approach
Paolo Gottarelli
Rhinoplasty Surgeon
Bologna, Italy

This is the English version of the Italian edition published under the title *La turbinoplastica inferiore modificata*, by Paolo Gottarelli
© Springer-Verlag Italia 2012

*The Publisher gratefully acknowledges the support of Ars Medica Italia for the images*


DOI 10.1007/978-88-470-2442-7

Springer Milan Heidelberg New York Dordrecht London

Library of Congress Control Number: 2011940270

© Springer-Verlag Italia 2012

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher’s location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

9 8 7 6 5 4 3 2 1 2012 2013 2014

Cover design: Ikona S.r.l., Milan, Italy
Typesetting: Ikona S.r.l., Milan, Italy
Printing and binding: Grafiche Porpora S.r.l., Segrate, Milan, Italy

*Printed in Italy*

Springer-Verlag Italia S.r.l. – Via Decembrio 28 – I-20137 Milan
Springer is part of Springer Science+Business Media
Since the beginning of my medicine studies I have always been fascinated by the possibility of changing facial features and, with this concern, rhinoplasty has always attracted me, until it has become the main goal of my professional career. After my military service as an Alpine Troops officer at the Italian frontier, at the age of 27 I became physician assistant at the Plastic Surgery Department ruled by Dr Carlo Cavina, who initiated me into practice of nose surgery through the first essential surgical concepts. Nine years later, as plastic surgery head physician assistant, I started to go and visit the most important nasal surgeons in the world, trying to widen the concepts and the techniques learned initially.

I still remember Fernando Ortiz Monasterio (1923) who, after a tennis match, explained to me the advantages of percutaneous greenstick osteotomy. It was May 19, 1986, and since that date I have only been using that method to draw the nasal bones nearer after nasal hump reduction or simply to correct a post-traumatic asymmetry – and always using a 2 mm straight osteotome.

I remember fundamental meetings with Ralph Millard (1919) and his 33 principles that even nowadays I consider an indispensable guide for any (not necessarily plastic) surgeon. In 1988 I was impressed by the technically over-careful rhinoplasty intervention performed by John B. Tebbetts in Dallas, Texas. Ruled by a strict logic, this young surgeon was able to stand up to the most famous nasal surgeons such as Jack Sheen. This convincing logic led him to write, in 1988, a beautiful book about the reasons why primary rhinoplasty should always be dealt with using open approach, with the help of a very sophisticated method. And it was in Dallas, Texas, that a group of excellent surgeons was created, led by Jack Gunter and followed by Steve H. Byrd, Rod J. Röhrich, John B. Tebbetts, and many others. With their lectures and guidelines collected in two volumes entitled *Dallas Rhinoplasty*,

Preface
they transformed the open approach into the best method to treat every part of the nose, not only in secondary cases, but even more in primary rhinoplasty cases: thanks to improved performance accuracy, primary cases did not evolve to secondary cases prompted by frequent relapse.

Back 1989, I started presenting the results obtained with Tebbetts’s technique at the major conferences. In April 1994 I won the first prize at the Congresso Italiano di videochirurgia plastica (Italian Congress of Videoplastical Surgery), three months before Tebbetts published his work about Force Vector Tip Rhinoplasty (FVTR) (Shaping and positioning the nasal tip without structural disruption, a new, systematic approach. Plast Reconstr Surg 94:61–77). The awarded video at that congress presented, with a two year follow-up, the solution to a serious problem of idiopathic unilateral valve insufficiency, only using Tebbetts’ technique with cartilage grafts and peculiar stitches.

In 1997, with Tebbetts’s authorization, I organized and led in Bologna the first multimedia live videolecture on nasal surgery, using this method. In the same year I had the idea to treat turbinate hypertrophy as a plastic surgeon would do with breast hypertrophy, by harmoniously reducing all three anatomical compartments of the turbinate itself, and then rebuilding it with accurate sutures so as to avoid the development of cicatrical synechiae, bleeding and, most of all, without the use of swabs. This method proved to be fundamental for patient well-being, because it provided a faster and, above all, definite recovery.

Since then I performed modified inferior turbinoplasty (MIT) on patients with functional diseases and when aesthetic surgery was required. All this with the aim to re-balance the loss of space inside the choanae caused by reduction rhinoplastic surgery that unavoidably affects their function.

Later, in 2003, I introduced the MIT technique at the Teknon Clinic in Barcelona, to an authoritative group of nasal surgeons headed by Eugene M. Tardy, Jr., who used and wrote words of admiration for this technique, that was actually derived from one of his teachers, Dr. Howard P. House.

One year later, in 2004, I was invited by Jaime Planas to hold three lectures and a live surgery at the homonymous clinic in Barcelona during the two-year course organized there. I remember the exact words that Planas told me: “Dear Gottarelli, I know many surgeons who do beautiful noses, but very few also know how to make them breathe. If it is true that your technique works, you’ve brought up a sore point, and this is why I’ve invited you to our course”.

In the following years, I made the new concept of nasal surgery more and more real, and defined it the “Global Rhinoplasty”. Global Rhinoplasty is based not only on MIT, but also on the so-called “Structural Rhinoplasty” introduced by Dean Toriumi and on the above-mentioned FVTR by John B. Tebbets.
This is what the most modern and up-to-date methodology can offer in this field, overcoming not only the controversies between open and closed rhinoplasty, but also the distinction between pure functional surgery and pure cosmetic surgery. In these interventions, elements belonging to either approach may be recognized. For this reason, considering the dichotomy between functional and cosmetic surgery as outdated, it is more correct to speak about nasal job or Global Rhinoplasty. This innovative approach of thinking and performing nasal surgery has not failed to meet the approval by hundreds of patients, who this year established a nonprofit association (Io Respiro Onlus, meaning “I Breathe”), committed to spread, among other goals, information on this new method. Moreover, a new training school for nose surgery has been created too; its goal is to train a new generation of nasal surgeons with experience in plastic surgery, otolaryngology, maxillo-facial surgery, endoscopic surgery and microsurgery.

Paolo Gottarelli
With sincere gratitude I would like to dedicate this book to those who followed me along my professional and medical career, namely: all my colleagues, the operating room personnel, as well as my staff who supported me with enthusiasm. In particular, I have to thank the gift of life and the strength my parents gave me, to whom I will eternally be grateful.
Contents

Introduction ....................................................... 1
1 The History of Rhinoplasty ................................. 3
2 Well-Being and Respiration ............................... 5
3 Nasal Anatomy and Function ............................. 7
4 The Inferior Turbinates .................................... 15
5 Diagnosis ...................................................... 17
6 How We Attained Modified Inferior Turbinoplasty ........ 21
7 The New Modified Inferior Turbinoplasty .................. 25
8 Post-traumatic Hump Nose ................................. 29
9 MIT, Step by Step ........................................... 31
10 The Concept of “Respiratory Symmetry” .................. 77
11 The Control of Relapses in Septal Deviations .......... 79
12 Conclusions .................................................. 81

Suggested Reading .............................................. 83
About the Author ................................................. 85